

In the Claims

Please replace all prior versions, and listings, of claims in the application with the following list of claims:

1-15. (Canceled)

16. (currently amended) A hollow radially expandable balloon member comprising an intermediate portion located between terminal portions which have a diameter smaller than the intermediate portion and having a fluid impervious wall, which balloon member is for use with a catheter for radially expanding a vessel in the body of a mammal, which catheter comprises a tube portion with a passage therethrough and which is adapted to have the hollow expandable balloon member secured to the tube portion by the smaller diameter terminal portions, whereby the balloon member can be inflated and deflated by a fluid passed through the passage of the catheter wherein:

- a. the wall of the balloon member has a substantially uniform thickness and is formed from a flexible substantially fluid impervious material having reinforcing fibres in a braided arrangement provided integrally with the wall material, which fibres act to limit the maximum radial expansion of the balloon member; and
- b. the intermediate portion of the balloon member has a radial diameter, in a deflated state, which corresponds substantially to a radial diameter of the intermediate portion of the balloon member at a maximum radially expanded state, whereby the balloon member can be inflated to its maximum radial expansion state as limited by the fibres within the wall material without causing substantial stretching of the wall material, such that the balloon member is non-compliant.

17. (withdrawn) A balloon member as claimed in claim 16, wherein the reinforcing fibres are provided by a polymer or metal mesh.

18. (previously presented) A balloon member as claimed in claim 16, wherein the reinforcing fibres are made from or contain a material having shape memory properties.

19. (cancelled)

20. (previously presented) A balloon member as claimed in claim 16, wherein the reinforcing fibres are filaments of a polyester polymer.

21. (previously presented) A balloon member as claimed in claim 16, wherein the braided fibres are in the form of two opposed helices of filaments.

22. (previously presented) A balloon member as claimed in claim 21, wherein the braid has a critical angle and the opposed helices are oriented to one another at or adjacent to said critical angle of the braid.

23. (cancelled).

24. (previously presented) A balloon member as claimed in claim 16, wherein the flexible wall material is a polyurethane.

25. (currently amended) A balloon catheter for radially expanding a vessel in the body of a mammal, which catheter comprises a tube portion with a passage therethrough and a hollow expandable balloon portion defined by a fluid impervious wall and secured to the tube portion, which balloon portion can be inflated and deflated by a fluid passed through the passage, wherein the hollow expandable balloon portion is a hollow expandable balloon member comprising an intermediate portion located between terminal portions which have a diameter smaller than the intermediate portion and having a fluid impervious wall, which catheter ~~comprises a tube portion with a passage therethrough and which~~ is adapted to have the hollow expandable balloon member secured to the tube portion by the smaller diameter terminal

portions, whereby the balloon member can be inflated and deflated by a fluid passed through the passage of the catheter, wherein:

a. the wall of the balloon member has a substantially uniform thickness and is formed from a flexible substantially impervious material having ~~reinforced~~ reinforcing fibres in a braided arrangement provided integrally with the wall material, which fibres act to limit the maximum radial expansion of the balloon member; and

b. the intermediate portion of the balloon member ~~is preformed with~~ has a radial diameter, in a deflated state, which corresponds substantially to a radial diameter of the intermediate portion of the balloon member at a maximum radially expanded state, whereby the balloon member can be inflated to its maximum radial expansion state as limited by the fibres within the wall material without causing substantial stretching of the wall material, such that the balloon member is non-compliant.